UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

ALIGN TECHNOLOGY, INC., Plaintiff, v. CLEARCORRECT OPERATING, LLC, CLEARCORRECT HOLDINGS, INC., & INSTITUT STRAUMANN AG, Defendants. --- CLEARCORRECT OPERATING, LLC, CLEARCORRECT HOLDINGS, INC., & STRAUMANN USA, LLC, Counterclaim-Plaintiffs, v. ALIGN TECHNOLOGY, INC., Counterclaim-Defendant.	Case No. 6:24-cv-00187-ADA-DTG PATENT CASE **JURY TRIAL DEMANDED**

CLAIM CONSTRUCTION ORDER

Before the Court are the Parties' claim construction briefs: Defendants ClearCorrect

Holdings, Inc., ClearCorrect Operating, LLC, and Institut Straumann AG and Straumann USA,

LLC (collectively, "ClearCorrect")'s Opening Claim Construction Brief (ECF No. 121), Plaintiff

Align Technology, Inc. ("Align")'s Responsive Claim Construction Brief (ECF No. 136),

Defendants' Reply Claim Construction Brief (ECF No. 138), Plaintiff's Sur-Reply Claim

Construction Brief (ECF No. 140), and the parties' Joint Claim Construction Statement (ECF No.

142). On January 21, 2025, the Court provided the parties with its Preliminary Claim

Constructions, and on January 22, 2025, the Court held a *Markman* hearing. The Court issues this Order to memorialize the Court's final claim construction rulings for the parties, and to inform the parties that the Court will issue a more-detailed order explaining its analysis in due course. The deadline to file any objections to the undersigned's claim construction rulings under Federal Rules of Civil Procedure 59 and 72 does not begin to run until the more-detailed order is entered on the docket.

IT IS SO ORDERED.

SIGNED this 5th day of June, 2025.

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DEREK T. GILLILAND
UNITED STATES MAGISTRATE JUDGE

#	Claim Term	Align's Proposed Construction	ClearCorrect's Proposed Construction	Court's Final Constructions
1	"through at least one of staggering and roundtripping of at least one dental object" '444 patent, cl. 1 (and dependent claims)	by staggering or roundtripping at least one dental object	through assessment of both staggering and roundtripping with respect to avoiding collisions with or obstructions between at least one dental object	Plain and ordinary meaning which includes "<u>by</u> staggering <u>or</u> roundtripping at least one dental object"
2	"an optimal number of stages for the order of movement of the dental objects" '444 patent, cls. 5, 19, 33	the largest number of the minimum stages needed to place the patient's teeth in their final, desired position	Indefinite	The largest number of the minimum stages needed to place the patient's teeth in their final, desired position
3	"V-shaped pattern" '444 patent, cls. 8, 22, 36 '456 patent, cl. 3	No construction necessary (plain and ordinary meaning)	A pattern where teeth having the same and/or similar positions on the arch will be moved beginning at the same stage, and will move continuously until they reach their final position, and where the most posterior-positioned teeth move first (e.g., the molars, or teeth in position 7 and/or 8) then the next anterior-positioned teeth move sequentially until all of the teeth reach their final position, with the next anterior-positioned teeth not scheduled to begin moving until at least approximately the half-way stage of its respective posterior-positioned tooth	Plain and Ordinary Meaning
4	"A-shaped pattern"	No construction necessary (plain	A pattern where teeth having the same and/or	Plain and Ordinary Meaning

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	'444 patent, cls. 9, 23, 37 '456 patent, cl. 3	and ordinary meaning)	similar positions on the arch will be moved beginning at the same stage, and will move continuously until they reach their final position, with the most anterior-positioned teeth (e.g., the incisors, or teeth in positions 1 and/or 2) moving first and then the next posterior-positioned teeth sequentially moving until all of the teeth reach their final position	
5	"M-shaped pattern" '444 patent, cls. 10, 24, 38 '456 patent, cl. 3	No construction necessary (plain and ordinary meaning)	A pattern where teeth having the same and/or similar positions on the arch will be moved beginning at the same stage, and will move continuously until they reach their final position, with teeth between the anterior teeth and the posterior teeth (e.g., the bicuspids, or teeth in positions 4 and/or 5) and both the adjacent anterior and/or adjacent posterior teeth then sequentially moving until all of the teeth reach their final position	Plain and Ordinary Meaning
6	"mid-line shift pattern" '444 patent, cls. 11, 25, 39 '456 patent, cl. 3	No construction necessary (plain and ordinary meaning)	A pattern where tooth movement begins on one side of the patient's arch to center the teeth with respective to the mid-line of the patient's mouth, with the next tooth/teeth to move not scheduled to begin moving until at least approximately the half way stage of its	Plain and Ordinary Meaning

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			respective previously scheduled tooth/teeth	
7	"means for receiving an electronic representation of each dental object of the plurality of dental objects in relation to one another" '444 patent, cl. 15 (and dependent claims)	a computing device and equivalents *E.g.*, '444 patent, 5:12-16	Subject to § 112 ¶ 6 • Function: receiving an electronic representation of each dental object of the plurality of dental objects in relation to one another • Structure: None Indefinite	Not indefinite Structure at '444 patent, 5:12-16 (a computing device and equivalents)
8	"means for determining an order of movement for each respective dental object such that the dental objects avoid colliding with each other on their respective routes from said initial position to said desired final position" '444 patent, cl. 15 (and dependent claims)	a computer program that performs the steps identified in Figure 2B and equivalents *E.g.*, '444 patent, 5:19-22, 5:29-6:46, Fig. 2B	Subject to § 112 ¶ 6 • Function: determining an order of movement for each respective dental object such that the dental objects avoid colliding with each other on their respective routes from said initial position to said desired final position. • Structure: None Indefinite	Indefinite
9	"means for determining a route each	a computer program that is configured to	Subject to § 112 ¶ 6	Indefinite

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	respective dental object will move to achieve its respective final position" '444 patent, cl 16 (and dependent claims)	segment an initial digital dataset into digital models of individual dental objects and gingival tissue, calculate a transformation for each dental object, and then calculate one or more intermediate positions for each dental object, taking into account any constraints imposed on the movement of dental objects and any collisions that might occur between dental objects as the dental objects move from one treatment stage to the next and equivalents *E.g.*, '444 patent, 3:19-24, 3:36-61	• Function: determining a route each respective dental object will move to achieve its respective final position • Structure: None Indefinite	
10	"means for determining (a), (b), and (c) in relation to each of the other dental objects"	a computer program that is configured to segment an initial digital dataset into digital models of individual dental	Subject to § 112 ¶ 6 • Function: determining (a), (b), and (c) in relation to each of the other dental objects	Indefinite

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	'444 patent, cls. 17 (and dependent claim)	objects and gingival tissue, calculate a transformation for each dental object, and then calculate one or more intermediate positions for each dental object, taking into account any constraints imposed on the movement of dental objects and any collisions that might occur between dental objects as the dental objects move from one treatment stage to the next and equivalents *E.g.*, '444 patent, 3:19-24, 3:36-61	• <u>Structure</u>: None Indefinite	
11	"means for determining a rate at which each respective dental object will move along its respective route" '444 patent, cls. 16 (and dependent claims)	a computer program that determines a rate at which each respective dental object will move along its respective route *E.g.*, '444 patent, 4:58-5:10	Subject to § 112 ¶ 6 • <u>Function</u>: determining a rate at which each respective dental object will move along its respective route • <u>Structure</u>: None Indefinite	Indefinite

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12	"means for determining a total distance each respective dental object will move" '444 patent, cl. 20	a computer program for determining a total distance each respective dental object will move and equivalents *E.g.*, '444 patent, 4:58-5:10	Subject to § 112 ¶ 6 • Function: determining a total distance each respective dental object will move • Structure: None Indefinite	Indefinite
13	"means for adjusting at least one of the route and the rate of at least one dental object to avoid collision with at least one other dental object" '444 patent, cl. 18	a computer program that performs collision avoidance via round-tripping, staggering, or slowing, wherein the computer program first attempts staggering of the teeth movement, followed by slowing-down/interim key frames if the staggering does not avoid collisions, and then followed by round-tripping as a last resort and equivalents *E.g.*, '444 patent, 12:41-65	Subject to § 112 ¶ 6 • Function: adjusting at least one of the route and the rate of at least one dental object to avoid collision with at least one other dental object • Structure: None Indefinite	Not indefinite. Structure at '444 patent, 12:41-65 a computer program that performs collision avoidance via round-tripping, staggering, or slowing, wherein the computer program first attempts staggering of the teeth movement, followed by slowing-down/interim key frames if the staggering does not avoid collisions, and then followed by round-tripping as a last resort and equivalents
14	"means for determining an optimal number	a computer program that determines an	Subject to § 112 ¶ 6	Not indefinite.

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	of stages for the order of movement of the dental objects" '444 patent, cl 19 (and dependent claim)	optimal number of stages by selecting the largest number of the minimum number of stages needed to place the dental objects in their final, desired positions and equivalents *E.g.*, '444 patent, 15:6-20	• <u>Function</u>: determining an optimal number of stages for the order of movement of the dental objects • <u>Structure</u>: None Indefinite	Structure at '444 patent, 15:6-20 a computer program that determines an optimal number of stages by selecting the largest number of the minimum number of stages needed to place the dental objects in their final, desired positions and equivalents
15	"means for ordering the movement of the dental objects in a V-shaped pattern" '444 patent, cl. 22	a computer program configured to utilize the pattern depicted in Figure 5 and equivalents *E.g.*, '444 patent, 9:12-15, 9:42-44, Fig. 5	Subject to § 112 ¶ 6 • <u>Function</u>: ordering the movement of the dental objects in a V-shaped pattern • <u>Structure</u>: None Indefinite	Not Indefinite. Structure at '444 patent, 9:12-15, 9:42-44, Fig. 5: a computer program configured to utilize the pattern depicted in Figure 5 and equivalents
16	"means for round tripping at least one dental object" '444 patent, cl. 27	a computer program configured to move a first tooth out of the path of a second tooth, and once the second tooth has moved sufficiently, move the first	Subject to § 112 ¶ 6 • <u>Function</u>: round tripping at least one dental object • <u>Structure</u>: None Indefinite	Not indefinite. Structure at '444 patent, 12:51-55: a computer program configured to move a first tooth out of the path of a second tooth, and

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		tooth back to its previous position before proceeding to a desired final position of the first tooth and equivalents *E.g.*, '444 patent, 12:51-55		once the second tooth has moved sufficiently, move the first tooth back to its previous position before proceeding to a desired final position of the first tooth and equivalents
17	"replace [replacing] at least a portion of the [removed] surface portion of the model […] using the received second scan data [at least a portion of the second scan data]" '936 patent, cls. 1 (and dependent claims), 9 (and dependent claims), 17 (and dependent claims)	No construction necessary (plain and ordinary meaning)	[register] / [registering] the [received] second scan data with a retained portion of the model after removing the scan data of the removed surface portion	[register] / [registering] the [received] second scan data with a retained portion of the model after removing the scan data of the removed surface portion
18	"second scan data of the patient's teeth" '936 patent, cl. 17 (and dependent claims)	No construction necessary (plain and ordinary meaning)	new scan data of the patient's teeth after the patient's intraoral cavity itself has physically changed	Plain and Ordinary Meaning